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| 10/005,901 | 12/05/2001 | Jim Bruton | [2011.001] 353.001 | 7210 |
| 32123 7590 12/31/2007 GEHRKE & ASSOCIATES, S.C. 123 N. 86th ST WAUWATOSA, WI 53226 | | | EXAMINER SMITH, CHENEA | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 10/005,901 | Applicant(s) BRUTON, JIM | |
| | Examiner Chenea P. Smith | Art Unit 2623 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5 and 8-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 5and 8-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This office action is in response to communications filed 9/28/2007. Claims 1 and 5 are amended. Claims 2-4 and 6-7 are cancelled. Claims 8-25 are new. Claims 1, 5 and 8-25 are pending in this action.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 5 and 8-25 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 11-13, 16, 18-20 and 23-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 11-13 and 18 recite, "the video compression element" in lines 1-2. Claims 11-13 are vague because there is a lack of antecedent basis for this limitation in the claims. It is suggested that the claims be corrected to recite, "a video compression element".

Claims 16, 19 and 23 recite, "the videoconferencing board" in lines 1-2. Claims 16, 19 and 23 are vague because there is a lack of antecedent basis for this limitation in the claims. It is suggested that the claims be corrected to recite, "a videoconferencing board".

Claims 20 and 24 recite, "the field-portable computer" in lines 1-2. Claims 20 and 24 are vague because there is a lack of antecedent basis for this limitation in the claims. It is suggested that the claims be corrected to recited, "a field-portable computer".

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 5 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks (of record) in view of Mullen (US5872539, hereinafter Mullen).

Regarding claim 1, Hendricks discloses an improved satellite-linked communication system for transmitting a present-time signal to any point on the earth, comprising:

a field-portable video element (see col 5, lines 27-38) that obtains visual and auditory information (see col 5, lines 20-22 and col 3, lines 43-47) of a present-time event (see col 3, line 67 and col 4, lines 1-2) at one point on the earth (see col 2, lines 64-67) and to produces a digital-based signal (video compression, see Fig. 3A, #118) corresponding to the present-time event (see col 6, lines 11-12), and

a digital-based (see col 23, lines 12-14) satellite-linked (see col 15, line 55) telecommunication system (see col 15, lines 61-62),

wherein the system is adapted to receive the digital-based signal corresponding to the present-time event (see col 6, lines 29-30 and Fig. 3) and to transmit to substantially any other point on the earth the digital-based signal corresponding to the present-time event (see col 6, lines 30-32), and

the transmitted digital-based signal has an error-to-signal ratio sufficiently low as to be deemed substantially satisfactory to a select number of viewers (see col 4, lines 5-8) (The Bit Error Ratio (BER), or error-to-signal ratio, is an indication of how often a data unit has to be retransmitted because of an error. Too high a BER may indicate that a slower data rate (i.e. one that matches, as opposed to one that is greater than) the highest speed of the viewer's machine would actually improve overall transmission time for a given amount of transmitted data by lowering the number of data units that had to be re-sent, and therefore reducing the BER sufficiently low as to be deemed substantially satisfactory the viewer).

Hendricks does not specifically disclose a system including at least one satellite-telephone.

In an analogous art, Mullen discloses a system that includes at least one satellite-telephone (see claim 22).

It would have been obvious for a person having ordinary skill in the art at the time of the invention to modify Hendricks's system to include a satellite-telephone, as disclosed by Mullen, for the advantage of providing an efficient system that is able to obtain more accurate information regarding an airplane's exact position by the user of the airplane transmitting a user data message to a central ground station via the satellite phone.

Regarding claim 5, Hendricks in view of Mullen discloses an improved satellite-linked communication system for transmitting a present-time signal to any point on the earth, comprising:

a field-portable (the compressions element must be a field computer because the video source, i.e., the camera, is a field computer, see col 5, lines 27-38) video compression element (compression unit 118) that obtains visual and auditory information (see Hendricks, col 5, lines 20-22 and col 3, lines 43-47) of a present-time event (see Hendricks, col 3, line 67 and col 4, lines 1-2) at one point on the earth (see Hendricks, col 2, lines 64-67) and to produces a digital-based signal (video compression, see Hendricks, Fig. 3A, #118) corresponding to the present-time event (see Hendricks, col 6, lines 11-12), and

a digital-based (see Hendricks, col 23, lines 12-14) satellite-linked (see Hendricks, col 15, line 55) telecommunication system (see Hendricks, col 15, lines 61-62) that included at least one satellite telephone (see Mullen, claim 22),

wherein the system is adapted to receive the digital-based signal corresponding to the present-time event (see Hendricks, col 6, lines 29-30 and Fig. 3) and to transmit to substantially any other point on the earth the digital-based signal corresponding to the present-time event (see Hendricks, col 6, lines 30-32), and

the transmitted digital-based signal has an error-to-signal ratio sufficiently low as to be deemed substantially satisfactory to a select number of viewers (see Hendricks, col 4, lines 5-8) (The Bit Error Ratio (BER), or error-to-signal ratio, is an indication of how often a data unit has to be retransmitted because of an error. Too high a BER may indicate that a slower data rate (i.e. one that matches, as opposed to one that is greater than) the highest speed of the viewer's machine would actually improve overall transmission time for a given amount of transmitted data by lowering the number of data units that had to be re-sent, and therefore reducing the BER sufficiently low as to be deemed substantially satisfactory the viewer),

and wherein the select number of viewers is a select number of global television and computer monitor viewers around the world via the Internet (see Hendricks, col 3, lines 65-67).

Regarding claims 11 and 13, Hendricks in view of Mullen discloses a video compression element (compression unit 118) as a stand-alone video compression device (see Hendricks, Fig. 2) which is capable of producing digital-based compressed video signals (see Hendricks, col 6, lines 29-30) with a low error-to signal ratio (The Bit Error Ratio (BER), or error-to-signal ratio, is an indication of how often a data unit has to be retransmitted because of an error. Too high a BER may indicate that a slower data rate (i.e. one that matches, as opposed to one that is greater than) the highest speed of the viewer's machine would actually improve overall transmission time for a given amount of transmitted data by lowering the number of data units that had to be

re-sent, and therefore reducing the BER sufficiently low as to be deemed substantially satisfactory the viewer), which has a built-in communications board for satellite-linked communications capability (see Hendricks, col 6, lines 12-17).

Regarding claims 12 and 14, Hendricks in view of Mullen discloses a video compression element as a field-portable computer (the compressions element must be a field computer because the video source, i.e., the camera, is a field computer, see col 5, lines 27-38) with a communications interface board (see Hendricks, col 6, lines 12-17).

7. Claims 18 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks (previously cited) in view of Mullen (previously cited), as applied to claims 1 and 5 above, and further in view of Wee (US6400763, hereinafter Wee).

Regarding claims 18 and 22, Hendricks in view of Mullen discloses a video compression device (compression unit 118) adapted to transmit digital-based compressed video signals (see Hendricks, col 6, lines 29-30), but does not specifically disclose a video compression device adapted to receive digital-based compressed video signals.

In an analogous art, Wee discloses a video compression device adapted to receive digital-based compressed video signals (see col 6, lines 1-4).

It would have been obvious for a person having ordinary skill in the art at the time of the invention to modify the system of Hendricks in view of Mullen to include a video compression device adapted to receive digital-based compressed video signals, as disclosed by Wee, for the advantage of re-using motion vectors used to predict frames.

8. Claims 19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks (previously cited) in view of Mullen (previously cited), as applied to claims 1 and 5 above, and further in view of Nerlikar (US5629981, hereinafter Nerlikar).

Regarding claims 19 and 23, Hendricks in view of Mullen does not specifically disclose a video conferencing board able to bundle and encrypt video and audio signals for security purposes.

In an analogous art, Nerlikar discloses a video conferencing board able to bundle and encrypt video and audio signals for security purposes (see col 11, lines 14-18).

It would have been obvious for a person having ordinary skill in the art at the time of the invention to modify the system of Hendricks in view of Mullen to include a video conferencing board able to bundle and encrypt video and audio signals for security purposes, as disclosed by Nerlikar, for the advantage of providing a secure communication method for sensitive or confidential content.

9. Claims 20 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks (previously cited) in view of Mullen (previously cited), as applied to claims 1 and 5 above, and further in view of Obear (US5021763, hereinafter Obear).

Regarding claims 20 and 24, Hendricks in view of Mullen discloses the field- portable computer (see Hendricks, col 5, lines 27-38), but does not specifically disclose a computer adapted to be fully functional under extreme physical conditions.

In an analogous art, Obear discloses a computer adapted to be fully functional under extreme physical conditions (see claim 1).

It would have been obvious for a person having ordinary skill in the art at the time of the invention to modify the system of Hendricks in view of Mullen to include a computer adapted to be fully functional under extreme physical conditions, as disclosed by Obear, for the advantage of providing a system that operates efficiently under extreme physical and environmental conditions.

10. Claims 21 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks (previously cited) in view of Mullen (previously cited), as applied to claims 1 and 5 above, and further in view of Bradley et al. (US5805067, hereinafter Bradley).

Regarding claims 21 and 25, Hendricks in view of Mullen does not specifically disclose a digital- based satellite-linked telecommunication system utilizes at least two satellite-telephones.

In an analogous art, Bradley discloses a digital- based satellite-linked telecommunication system utilizes at least two satellite-telephones (see Fig. 1).

It would have been obvious for a person having ordinary skill in the art at the time of the invention to modify the system of Hendricks in view of Mullen to include digital- based satellite-linked telecommunication system utilizes at least two satellite-telephones, as disclosed by Bradley, for the advantage of providing an efficient system that is able to obtain more accurate information regarding multiple airplanes' exact position by the users of the airplanes transmitting user data messages to a central ground station a via the satellite phones.

11. Claims 8-10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks (previously cited) in view of Mano (US5070524, hereinafter Mano) and Bradley (previously cited).

Regarding claim 8, Hendricks discloses an improved satellite-linked communication system for transmitting a present-time signal to any point on the earth, comprising:

a field-portable (the compressions element must be a field computer because the video source, i.e., the camera, is a field computer, see col 5, lines 27-38) video compression element (compression unit 118).

Hendricks does not specifically disclose a unit capable of bonding at least two separate 64 thousand bytes per second (64 Kbps) signal bundles, or, at least two satellite-telephone communications systems.

In an analogous art, Mano discloses a unit capable of bonding at least two separate 64 thousand bytes per second (64 Kbps) signal bundles (see col 3, lines 21-24).

It would have been obvious for a person having ordinary skill in the art at the time of the invention to modify Hendricks's system to include a unit capable of bonding at least two separate 64 thousand bytes per second (64 Kbps) signal bundles, as disclosed by Mano, for the advantage of providing multiple remote communication signals to a single user.

Hendricks in view of Mano does not specifically disclose at least two satellite-telephone communications systems.

In an analogous art, Bradley discloses at least two satellite-telephone communications systems (see Fig. 1).

It would have been obvious for a person having ordinary skill in the art at the time of the invention to modify the system of Hendricks in view of Mano to include digital-based satellite-linked telecommunication system utilizes at least two satellite-telephones, as disclosed by Bradley, for the advantage of providing an efficient system that is able to obtain more accurate information regarding multiple users' exact location via the satellite phones.

Regarding claim 9, Hendricks in view of Mano and Bradley discloses a video compression element (compression unit 118) as a stand-alone video compression device (see Hendricks, Fig. 2) which is capable of producing digital-based compressed video signals (see Hendricks, col 6, lines 29-30) with a low error-to signal ratio (The Bit Error Ratio (BER), or error-to-signal ratio, is an indication of how often a data unit has to be retransmitted because of an error. Too high a BER may indicate that a slower data rate (i.e. one that matches, as opposed to one that is greater than) the highest speed of the viewer's machine would actually improve overall transmission time for a given amount of transmitted data by lowering the number of data units that had to be re-sent, and therefore reducing the BER sufficiently low as to be deemed substantially satisfactory the viewer), which has a built-in communications board for satellite-linked communications capability (see Hendricks, col 6, lines 12-17).

Regarding claim 10, Hendricks in view of Mano and Bradley discloses a video compression element as a field-portable computer (the compressions element must be a field computer because the video source, i.e., the camera, is a field computer, see col 5, lines 27-38) with a communications interface board (see Hendricks, col 6, lines 12-17).

Regarding claim 17, Hendricks in view of Mano and Bradley discloses at least two satellite-telephones connected to digital-based field computer via wireless transmission signals (see Bradley, Fig. 1).

12. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks (previously cited) in view of Mano (previously cited) and Bradley, as applied to claim 8 above, and further in view of Wee (previously cited).

Regarding claim 15, Hendricks in view of Mano and Bradley discloses a video compression device (compression unit 118) adapted to transmit digital-based compressed video signals (see Hendricks, col 6, lines 29-30), but does not specifically disclose a video compression device adapted to receive digital-based compressed video signals.

In an analogous art, Wee discloses a video compression device adapted to receive digital-based compressed video signals (see col 6, lines 1-4).

It would have been obvious for a person having ordinary skill in the art at the time of the invention to modify the system of Hendricks in view of Mano and Bradley to include a video compression device adapted to receive digital-based compressed video signals, as disclosed by Wee, for the advantage of re-using motion vectors used to predict frames.

13. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks (previously cited) in view of Mano (previously cited) and Bradley (previously cited), as applied to claim 8 above, and further in view of Nerlikar (previously cited).

Regarding claim 16, Hendricks in view of Mano and Bradley does not specifically disclose a video conferencing board able to bundle and encrypt video and audio signals for security purposes.

In an analogous art, Nerlikar discloses a video conferencing board able to bundle and encrypt video and audio signals for security purposes (see col 11, lines 14-18).

It would have been obvious for a person having ordinary skill in the art at the time of the invention to modify the system of Hendricks in view of Mano and Bradley to include a video conferencing board able to bundle and encrypt video and audio signals for security purposes, as disclosed by Nerlikar, for the advantage of providing a secure communication method for sensitive or confidential content.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chenea P. Smith whose telephone number is (571) 272-9524. The examiner can normally be reached on Monday through Friday, 7:30 am - 5:00 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Chenea P. Smith
12/22/2007


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